

DOCUMENT RESUME

ED 255 294

PS 014 990

AUTHOR Baxter, Cynthia McHugh; Workman, Susan
TITLE The Influence of Teacher Behavior on Child Social Participation Behavior.
PUB DATE [83]
NOTE 13p.; Paper presented at the Annual Meeting of the Northern Rocky Mountain Educational Research Association (2nd, Jackson Hole, WY, October 4-6, 1984).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Interpersonal Competence; Peer Relationship; Play; *Preschool Children; Preschool Education; *Preschool Teachers; Sensitivity Training; Socialization; *Student Behavior; *Teacher Behavior; Teacher Student Relationship
IDENTIFIERS *Cooperative Play; *Social Participation

ABSTRACT

The study, which investigated the influence of teacher behavior on the social participation of 4-year-old preschool children, was conducted in three phases: pretraining, training, and post-training. In the first phase, four preschool teachers were observed for approximately 30 minutes, 3 days a week, for a 2 week period during free play sessions at a university laboratory school. Their behaviors were then encoded according to the behaviors defined by Fagot (1973). The children's behaviors were coded according to the social participation behaviors defined by Parten (1932). Teacher behaviors which occurred most frequently during children's cooperative play at the pretraining phase were chosen for the training phase. Training sessions (held for 1/2 hour, 3 days a week, for a 2 week period) included instructional handouts to guide videotape viewing and daily feedback for classroom performance of training behaviors. Results indicated that videotape training was effective in increasing teacher play and observing behaviors. Children's behaviors changed when teacher behaviors changed. Increased amounts of associative and cooperative play were observed, while parallel and unoccupied behaviors decreased. Cooperative play only increased during the training phase of the study. (Author/AS)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED255291

PS 014990

5.2

THE INFLUENCE OF TEACHER BEHAVIOR
ON CHILD SOCIAL PARTICIPATION BEHAVIOR
Cynthia McHugh Baxter, Susan Workman
Montana State University

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☒ This document has been reproduced as
received from the person or organization
originating it.
☐ Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official NIE
position or policy.

ABSTRACT

This study was designed to investigate the influence of teacher behavior on the social participation of preschool children. It examined how a change in teacher behavior affected the children's social participation behavior.

The study was conducted in three phases; pretraining, training and post-training. Four teachers were observed during the free play period at the university laboratory preschool. Teacher behaviors were observed and coded for approximately 30 minutes, three days a week, for a two week period. Teacher behaviors were coded according to behaviors defined by Fagot (1973). Child behaviors were coded according to the social participation behaviors defined by Parten (1932).

Teacher behaviors which occurred most frequently during the children's cooperative play at the pretraining phase were chosen for training. Training sessions were held following preschool sessions for one half hour, three days a week for a two week period. Included in the training sessions were instructional handouts to guide video-tape viewing and daily feedback for classroom performance of training behaviors. Teacher and child behaviors were coded again during the post-training phase. Post-training data was used for comparisons among the three phases of the study.

Results indicated that the video-tape training was effective in increasing teacher play and observing behaviors. Open-ended questioning did not increase. When teacher behaviors were changed child behaviors also changed. Increased amounts of associative and cooperative play were observed. Parallel and unoccupied behaviors decreased. Cooperative play only increased during the training phase of the study.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Susan
Workman

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

THE INFLUENCE OF TEACHER BEHAVIOR
ON CHILD SOCIAL PARTICIPATION BEHAVIOR
Cynthia McHugh Baxter, Susan Workman
Montana State University

Peer interaction is important for a child's social development. Social participation (involvement in groups within a social/non social context during play) is one type of peer interaction which is commonly found in the preschool setting.

As teachers examine their roles in the socialization of children, the effect of their behavior on a child's behavior becomes important. Teacher behavior has been shown to influence task persistence, self-esteem, leadership and levels of engagement within planned activities (Fagot, 1973; Thompson, 1974; Phyfe-Perkins, 1980). Since teachers have been shown to influence the behavior of children in these areas, this study sought to show that teacher behavior influences the social participation of children. It also attempted to describe a range of preschool teacher behaviors which influence a child's social participation as defined by Parten (1932). The purpose of this effort was to help teachers to view their own behavior in relation to its effect on a child's social participation.

Hypotheses

There were 2 null hypotheses that were addressed by this study:

1. Teacher behaviors do not influence the social participation behavior of children.
2. The social participation of 4 year old children will not change when teachers are trained to perform certain behaviors.

Research Design

The design of this study was a pretest - post-test design with a training period between pretest and post-test. The study was divided into 3 basic data collection and analysis sections: pretraining, training and post-training. Pretraining baseline data was used to determine the behaviors used in the training procedure and to provide baseline data for comparisons.

A six day training period was conducted following the pretraining baseline data collection period. The training consisted on the four teachers viewing a videotaped teaching sequence which showed an unfamiliar teacher modeling positive examples of observing, participating in play and asking open-ended questions, the three behaviors chosen for the training. The twenty minute tape was viewed by the teacher as a group with a supervisor providing cues during the viewing to the behaviors. Two instructional handouts were used to provide further cueing to the behaviors on the tape. Teachers viewed the tape 3 times with one teacher being absent for the third viewing. The viewings took place during the first, third and fifth training sessions. Training sessions lasted approximately one half hour including discussion time after viewing the tape.

Daily reinforcement of the training behaviors was given to each teacher at the end of the class time by the supervisor. Anecdotal records showing positive child responses or unique techniques used by the teachers were discussed daily by the group.

During the training period, data collection was continued in the same format as the pretraining collection. Teacher behaviors and child behaviors were observed and coded for approximately 30 minutes over a two week period. Data was used to make comparison of teacher behavior changes and to note any changes in child behavior.

The third section of the study was the post-training data collection period. Following the training, teacher behavior was no longer reinforced by the supervisor. Data collection followed the same format as used in the previous two collections. Analysis followed to determine the extent of sustained teacher behavior change and the relative effect on the child's social behavior.

Subjects

Teachers: This study involved four preschool teachers, who taught in the 4-year-old group at the Child Development Center at Montana State University. Teachers, deemed qualified to work with young children by the director of the center, were chosen to participate in the group by the director. Selection of teachers was made independently of this study.

Children: Children participating in the preschool program were between the ages of 4 years, 4 months and 5 years, 4 months at the beginning of the study and had been members of the same class for the previous 3 months. The class met on Monday, Wednesday and Friday for 2-1/2 hours. The children attending the school were from white middle socioeconomic group families.

Observation Techniques

Time Sampling: In this study two observers were used for the same 3 second time period. One observer watched and recorded the behaviors displayed by the teacher and the other observed and recorded the behaviors of the children in the area with the teacher.

Rotation: Rotations consisted of observing a teacher for at least 10 consecutive 3 second intervals then rotating to a new teacher at random until all four teachers had been observed for a total of 600 intervals over a period of 6 school days. The observer recorded the teacher's name, time of day, the area of the classroom the teacher was in, and the specific teacher behavior being performed. The child observer recorded the child's social behavior and also recorded the teacher's name, time and area of the classroom.

Teacher Behavior

The behaviors of each teacher were coded according to a numerical system for 10 consecutive 3 second coding intervals. During each set of intervals the observer watched a particular teacher for 3 seconds then

coded her teaching behavior. In the following 7-10 seconds the observer recorded the behavior on the coding sheet. The coding continued for at least 10 consecutive coding intervals, then the rotation to the next available different teacher occurred. The specific teacher behavior was adapted from Fagot (1973) and validated in a pilot study. Behaviors, coding numbers and definitions adopted for this study are as follows:

1. OBSERVING - Teacher is physically away from children and less available for interaction with the children. Watching the children is her primary activity.
2. NOT INTERACTING - Teacher is near children and available for interaction with the children but is not involved in any form of interaction with the children.
3. INTERACTING -
 - 3-1. LISTENING - Teacher is involved in an interaction with a child or children who are directly speaking to her.
 - 3-2. GIVING INFORMATION - Teacher verbally gives information not attempting to change the child's behavior.
 - 3-3. ASKS ACADEMIC QUESTION - Teacher asks questions expecting a particular response or a simple yes, no answer.
 - 3-4. ASKS QUESTION OPENENDED - Teacher is asking general questions which do not elicit a particular response.
 - 3-5. DIRECT/REDIRECT - Teacher is attempting to change a child's behavior through verbal or physical directions.
 - 3-6. SOLICIT - Teacher attempts to verbally or physically direct a child to another play area.
 - 3-7. COMMENTS POSITIVELY - Teacher makes positive verbal comments about a child's actions or products.
 - 3-8. CRITICIZES - Teacher shows disapproval, verbally or through physical action, of a child's actions.
 - 3-9. PLAYS - Teacher actively participates in play situation with children.
 - 3-10. HELPING - Teacher is involved in aiding a child with a maintenance task (e.g. tying their shoe, stapling papers).
 - 3-11. TOUCHING - Teacher is interacting with a child by physically touching them, usually in an attempt to comfort them.
 - 3-12. OTHER - Teacher behaviors which may not be categorized in any other group were placed here.

Child Social Participation Behaviors

Child behaviors were coded by a second observer for identical time intervals with teacher behaviors. During 10 consecutive coding intervals children's social participation behavior were recorded. Codes consisted of the first letter of the category (i.e. u for unoccupied). Only children within the area of the teacher's responsibility were coded. While the "teacher" observer was observing the teacher for 3 seconds and recording teacher behavior, the "child" observer was observing the children in the area and recording social participation behavior. The specific child behaviors which were observed were adopted from Parten (1932). Behaviors were validated in a pilot study. Behavior definitions along with codes used for this study are as follows:

- U - UNOCCUPIED - The children apparently are not playing at all but occupy themselves with watching anything of momentary interest.
- O - ONLOOKER - The children spend most of their time watching others at play. May talk with others but does not overtly enter the play.
- S - SOLITARY PLAY - The children play alone and independently, each with toys that are different from those used by other children within the same area.
- P - PARALLEL PLAY - The children play independently, but use similar toys and the activity brings them among each other but there is no attempt to influence the activity to others. Very little if any interaction. Play is "beside" rather than "with" others.
- A - ASSOCIATIVE PLAY - The children play with other children. There is interaction among the children, borrowing and lending materials but all engage in similar if not identical activity. There is no division of labor or organization of activity. Each child acts as he or she wishes, not as the group may dictate.
- C - COOPERATIVE PLAY - The children play as a group that is organized for the purpose of obtaining a group goal, or dramatizing adult situations, or formal games. Each child within the group has an identifiable role. There is a division of labor established.

ANALYSIS OF DATA

Analysis of data was performed twice during the study. The first analysis took place following the pretraining session. The second analysis following the post-training.

The behaviors from the code sheets were tabulated. The raw frequency of occurrences of child behavior with occurrences of teacher behavior for the same 3 second coding interval were tabulated. Following the post-training, teacher behaviors and child behaviors for each phase of the study were calculated and figured into percentages. A chi square test for independence was performed between teacher behavior and phase of the study.

RESULTS

The results of this study indicate that two teacher training behaviors were increased using a video-tape training procedure. The influence of teacher behavior on childrens' social participation was also shown. Children's social participation did change when teachers were trained to perform certain behavior.

Teacher Behaviors: For the group as a whole, 29.5% (2131 behaviors) of the teachers' behaviors were not interacting, making it the most frequently occurring behavior overall. Only one teacher behavior, criticizing did not occur at any time during the study. Together, four behaviors (not interacting (29.5%), listening (18.9%), giving information (10.5%), and observing (9%)) accounted for 68.7% or roughly 2/3 of the teacher behavior.

Pretraining: Results from analysis of the pretraining data were used to choose the behaviors for the training sessions. Frequencies of occurrence of teacher behavior were totaled in relation to occurrence of child behavior. Specifically, teacher behaviors which frequently occurred in the same interval with cooperative play were chosen. Observing, play and openedended questioning were chosen on the basis of their frequency of occurrences with cooperative play.

Seventy-five percent of the time during the pretraining when teachers were observing, children were involved in cooperative play. Likewise, when teachers were coded as playing, 48.3% of the time children were engaged in cooperative play. Twenty-five percent of the time when teachers were using openedended questioning children were involved in cooperative play.

Training: During the training phase of the study, two of the training behaviors increased and one remained relatively the same. Figure 1 illustrates the percentage of time for each teacher behavior code for the three phases of the study. Observing increased from occurring 2.7% of the time during the pretraining to 8.2% of the time during the training. Play also increased from 1.8% of time pretraining to 10.1% during the training. Openedended questioning remained relatively stable at 2.7% in pretraining to 2.2% during training.

Post-Training: The training behaviors continued to change in frequency during the post-training phase (see Figure 1). Observing continued to increase in frequency from 8.2% to 18.5% of the time. Play, on the other hand, decreased in the post-training from 10.1% to 6.5%. Openedended questions again remained relatively stable, 2.2% training to 2.4% post-training.

Relation of Teacher Behavior to Phase Study

A chi square test was used to determine if occurrence of teacher behavior differed from one phase of the study to another. The test for independence between all teacher behaviors and the phase of study was found to be significant (χ^2 (df=24) = 554 $p < .0001$). Since the χ^2 figure differed significantly from chance, the variables of teacher behavior and phase of study are not independent. The chi square test indicates that the training effected teachers' behaviors.

Child Behavior

The most commonly occurring child behavior of all phases of the study was associative play, which occurred 27.5% of the total time. Solitary play was the second most common, with 25.5% of the frequencies, while parallel and cooperative play occurred 17.9% and 16.5% respectively.

Pretraining: In the pretraining session, parallel and solitary play behaviors occurred most frequently (25.6% and 24.8% respectively) (see Figure 2). Cooperative play occurred 15.9% of the time during the pretraining.

Training: Changes in child behavior from pretraining to training showed increases in some behaviors and decreases in others (see Figure 2). While unoccupied behavior dropped during the training from 4.7% in

pretraining to 2.5% during the training, onlooker behavior remained relatively the same throughout all phases of the study. Occurrences of solitary play remained high during the training phase, 24.3% of the time. Parallel play behavior dropped dramatically from occurring 25.8% to 13.6% of the time. The increase in associative play was from 19% to 31.5%, while cooperative play also increased from 15.9% to 17.6% during the training.

Post-Training: Child behaviors continued to change during the post-training phase of the study as seen in Figure 2. In the post-training phase, associative play remained the highest occurring child behavior. Unoccupied behavior continued to drop to a low occurrence of only 1.3% of the time. Solitary play increases slightly in the post-training to 27.6% making it the second most frequently occurring behavior during the post. Parallel play increased following the training from 13.6% to 14.8% of the time. Both associative and cooperative play dropped slightly in the post-training. Associative play dropped from 31.5% to 30.4% and cooperative play from 17.9% to 15.8% of the time. These data rejected the null hypothesis that the social participation of 4 year old children will not change when teachers are trained to perform certain behaviors.

Teacher Behavior and Child Behavior

The next set of analyses focused directly on the pairing of child behaviors to teacher behaviors. Raw frequencies of occurrence of child behaviors with occurrence of teacher behavior for the same three second coding interval were tabulated by phase of training. The paired raw frequencies were then expressed in terms of proportional distribution of child behaviors with teacher behaviors. The percentage with which each category of teacher behavior was observed with each category of child behavior was figured. Results indicated that 75.7% of the time when teachers were observing, children were involved in cooperative play. These data lead to the rejection of the null hypothesis that teacher behavior does not influence the social participation behavior of children.

DISCUSSION

The distribution of frequency of teacher behaviors showed that teachers spent a great deal of time not interacting, listening and giving information. These findings were consistent with some general findings of a previous study done at the Child Development Center (Baker, 1983). In Baker's study, teachers were found to be suppressing the need for children to use social skills by giving enough materials so sharing was not necessary, by giving directions, or by redirecting so that verbal exchanges were not completed (Baker, 1983).

In this study teachers were performing similar behaviors. This could account for the high amount of lower level social participation behaviors among the children. Teachers, who were coded as spending a great deal of time not interacting, were physically near the children but not directly involved in playing with the children. Rather than playing, they spent a good deal of their time listening and giving information. It is possible that since teachers were so available to children, teacher/child interaction occurred rather than interaction among the children.

When teachers were verbally interacting with children, it was generally in the form of giving information, asking academic questions or directing/redirecting. These teacher behaviors were generally disrupting to the flow of interactions among the children. Phyfe-Perkins (1981) noted that high levels of direct instruction and asking direct questions were negatively correlated with children's cooperation, independence and verbal initiative.

The Child Development Center curriculum is "planned activity" centered. Activities, (planned learning experiences), are set up each day in the curriculum areas of the room by the teachers. The teachers were often involved in activities where giving information, asking academic questions and directing/redirecting were required for the success of the activity. These types of activities which require teacher direction may not be the best for promoting social development because they allow less opportunity for certain types of social participation behaviors to occur.

Contrary to Parten's (1932) findings, the frequency of solitary play remained at a relatively high level of occurrence throughout the three phases of the study. Some of this solitary behavior as well as the unoccupied behavior may be due to the scheduling of the free play time used by the Center. A snack and outdoor activity were included in the free play times. While a group of four or five children were involved in eating snack, often another group would be in the outdoor play yard. Observations done in this study did not include snack and outdoor areas. Solitary play may have been occurring in a higher amount because there were actually fewer numbers of children who were available to play in groups during the times when children were involved in snack or were outdoors.

The findings also indicated a variety of teacher responses to the training. Play and observing increased while openended questioning remained relatively low, showing a difference among the training behavior. The use of the video-tape medium may account for the difference in increase. Play and openended questioning behaviors may need a more intensive modeling sequence than the video-tape session in the training provided. Observing behaviors, which are more easily modeled, showed the largest increase from pretraining to post-training. The fact that the play decreased after the training was over may indicate that continued modeling and feedback are needed in order for teachers to maintain play behavior.

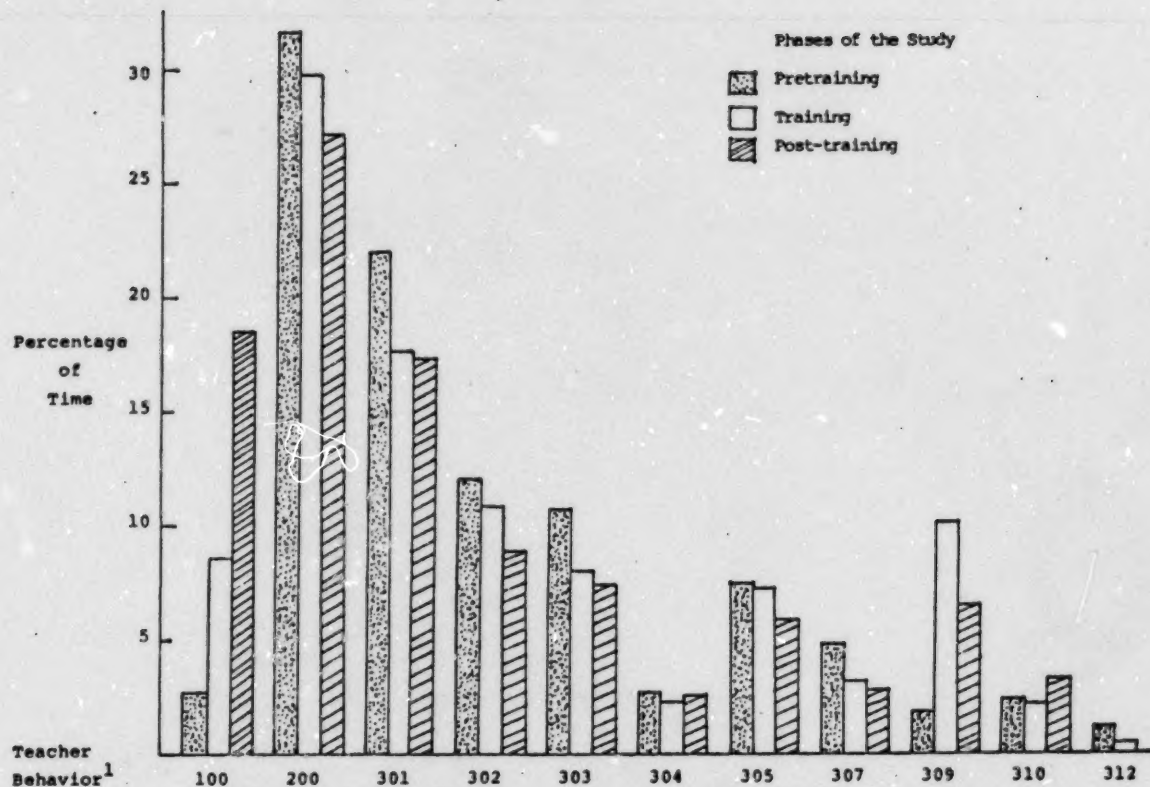
The low frequency of observing and play in the pretraining may be due to the lack of an in-class role model. During the training sessions comments made by teachers indicated there was a lack of a model for these behaviors. "I didn't know we could just watch them" and "I didn't think it was kosher to play with them" were two of the comments made by teachers indicating that these behaviors were not originally seen as part of the teacher's role in the classroom. Since generally the role of the teachers was seen as directing an activity, when the feedback and modeling on the tape were no longer available, teachers returned to some of their original behaviors.

More research on effective training of teachers in skill areas which influence the development of social participation in children is needed. For educational programs where the goals for children include development

of social skills, effective teacher training may be a readily available method by which teachers could effect the level of social participation in their classrooms. Further research on how play and observing can be used effectively by teachers would be useful in developing such a teacher training program. Research on the exact nature of the relationship between certain teacher playing techniques and social participation might reveal the most effective behaviors to train. The effectiveness of video-tape modeling of specific teacher behaviors needs to be further explored in order to be able to conduct effective video training of play behaviors. Through effective teacher training, teachers would be able to use their own behaviors to facilitate social development in young children.

REFERENCES CITED

- Baker, D.L., (1983). Social skills and the formation of friendship by preschool children. Unpublished master's thesis, Montana State University, Bozeman, Mt.
- Fagot, B.I. (1973). Influence of teacher behavior in the preschool. Developmental Psychology, 9(2), 198-206.
- Parten, M.B. (1932). Social participation among preschool children. Journal of Abnormal and Social Psychology, 27, 243-269.
- Phyfe-Perkins, E. (1981). Effects of teacher behavior on preschool children: A review of research, (Catalog no. 194) Urbana Ill. University of Illinois, Eric Document Clearinghouse on Elementary and Early Childhood Education (Eric Document Reproduction Service No. Ed 211-176).
- Thompson, G.C. (1944). The social and emotional development of preschool children under two types of educational programs. Psychological Monographs, 56, 1-24.



¹ Teacher behavior codes 100=observing, 200=not interacting, 301=listening, 302=giving information, 303=academic questions, 304=openended questions, 305=direct/redirect, 306=solicitte, 307=comment positively, 308=criticize, 309=play, 310=helping, 311=touching, 312=other.

Figure 1. Percentage of time for teacher behaviors during the three phases of the study. (Behaviors 306, 308 and 311 were omitted from this figure because they totalled less than .3% of the data).

BEST COPY

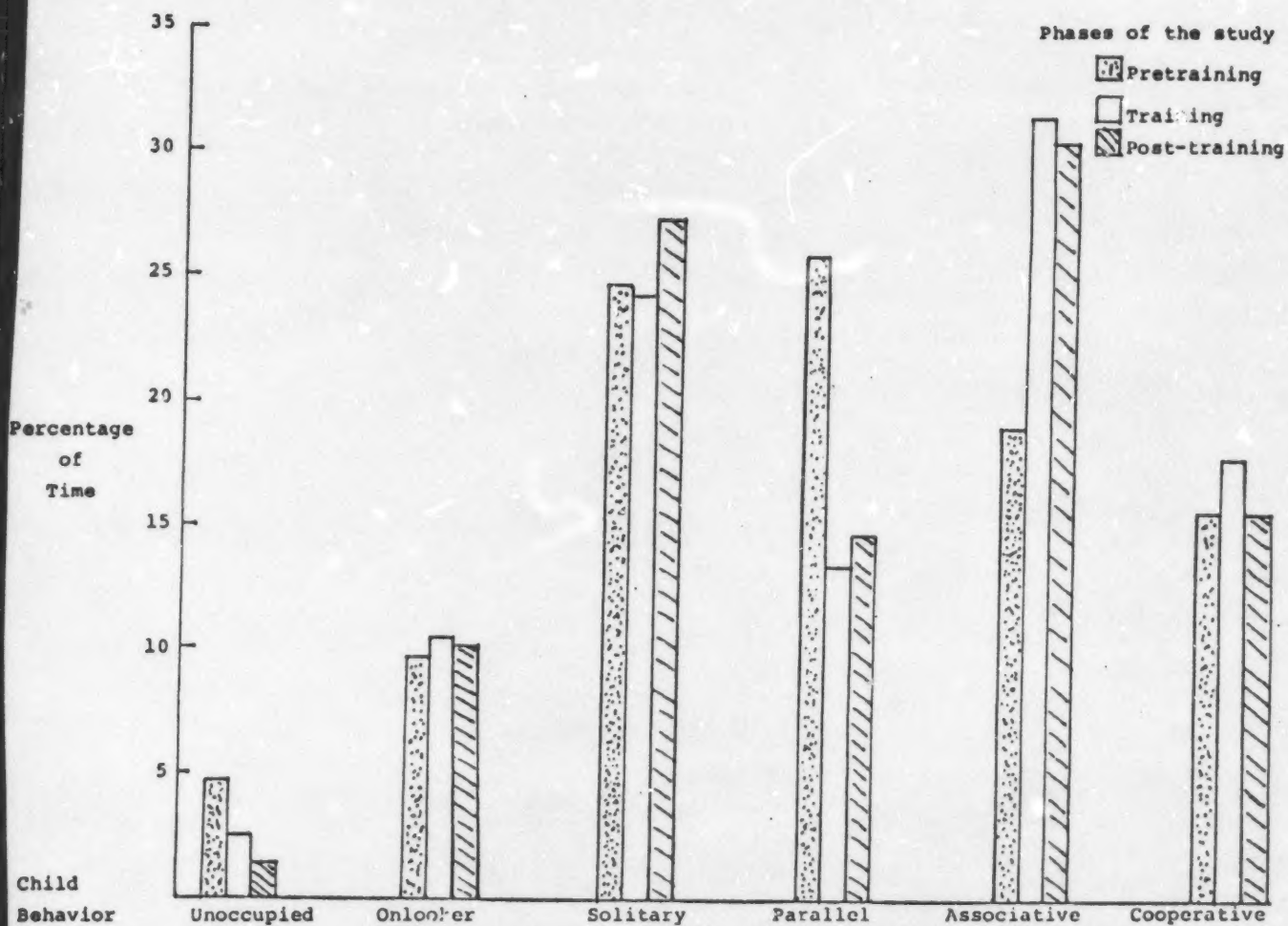


Figure 2. Percentage of time for child behaviors during the three phases of the study.